

Patent Abstracts of Japan

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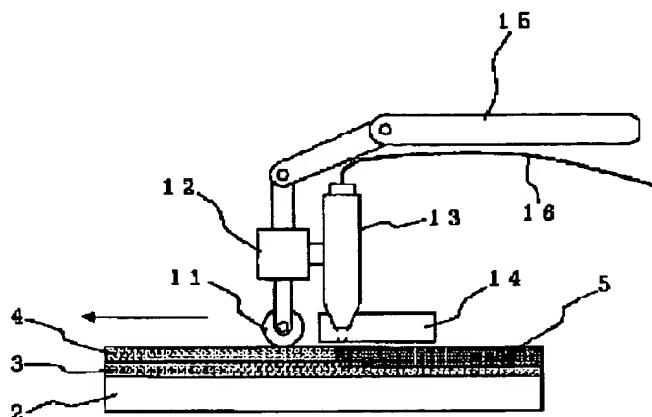
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APPLICANT : NKK CORP;

INVENTOR : TAKANO TOSHIO;

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TITLE : JOINTING METHOD OF TITANIUM
 CLADDED STEEL PLATE



ABSTRACT : PROBLEM TO BE SOLVED: To simply joint a titanium cladded steel without generating corrosion and crack of a weld zone or disturbing workability by laser-welding a titanium plate while pressurizing the plate so that a spacing between the titanium cladded steel plate and the titanium plate becomes a given value or less.

SOLUTION: A laser welding device comprises, for example, a pressing cylinder 12 which is mounted to a robot arm 15 and connected with a pressing roller 11 for continuously pressing a titanium cladded steel from above a titanium plate 4, a laser welding torch 13 mounted to a rear part of the pressing cylinder 12, and an inert gas shield box 14. The titanium plate 4 is pressed towards a titanium cladding material 3 side of the titanium cladded steel plate by means of the pressing cylinder 12 and the pressing roller 11, so that a spacing between the titanium plate and the titanium cladded steel plate becomes 0.5 mm or less. If the spacing is 1 mm or more, the titanium plate 4 and the titanium cladding material 3 are not short-circuited by a molten metal, and not jointed.

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